

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
13 February 2003 (13.02.2003)

PCT

(10) International Publication Number  
**WO 03/011108 A2**

(51) International Patent Classification<sup>7</sup>: **A61B**

(21) International Application Number: **PCT/US02/23958**

(22) International Filing Date: **29 July 2002 (29.07.2002)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
**60/308,872** **30 July 2001 (30.07.2001)** **US**

(71) Applicant (for all designated States except US): **HENRY FORD HEALTH SYSTEM** [US/US]; Office of Corporate Legal Affairs, 1 Ford Place, 4B, Detroit, MI 48202-3450 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FRINAK, Stanley** [US/US]; Henry Ford Hospital, 2799 W. Grand Blvd., CFP-543, Detroit, MI 48202 (US). **ZASUWA, Gerard** [US/US]; Henry Ford Hospital, 2799 W. Grand Blvd.,

CFP-543, Detroit, MI 48202 (US). **YEE, Jerry** [US/US]; Henry Ford Hospital, 2799 W. Grand Blvd., CFP-519, Detroit, MI 48202 (US). **BESARAB, Anatole** [US/US]; Robert C. Byrd Medical Center, Division of Nephrology, Department of Medicine, HSS 1264, P.O. Box 9165, Morgantown, WV 25606-9156 (US).

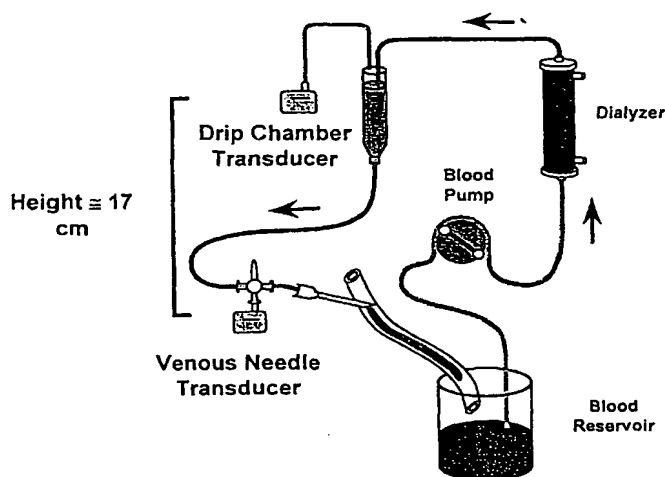
(74) Agent: **RINALDO, Amy, E.**; Kohn & Associates, PLLC, 30500 Northwestern Highway, Suite 410, Farmington Hills, MI 48334 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: **ACCESS PRESSURE RATIO DEVICE AND TESTING METHOD**



Dialysis circuit used to determine the relationship between blood flow and venous drip chamber pressure at different values of hematocrit.

(57) **Abstract:** The present invention discloses a detection device for detecting irregular intravascular pressure, the device including an analyzer for automatically analyzing intravascular pressure upstream of the suspected location of irregular blood flow, and a comparing device that correlates the recorded intravascular pressure to a standard whereby variation in the intravascular pressure during multiple tests is indicative of irregular blood flow. Also disclosed is a system for providing a warning of potential health problems due to irregular blood flow, the system including a detecting device as set forth above and a communicating device operatively connected to the detecting device for communicating a warning when the device indicates an irregularity of intravascular pressure during at least two uses of the device.

WO 03/011108 A2



ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *without international search report and to be republished upon receipt of that report*